

AMENDMENTS TO THE CLAIMS

The claims and their status are reflected below. Claims 85-95 are pending in the application.

1-84. (Cancelled)

85. (Currently Amended) A method for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the method comprising:

directing a first beam of polarized light to impinge at said region on the surface at a first incident angle relative to a direction normal to the surface;

collecting scattered light caused by the first beam over a predetermined area and integrating the intensities of the scattered light over said area to form a first integrated response;

directing a second beam of P-polarized light to impinge at said region on the surface at a second incident angle relative to a direction normal to the surface and which where the second incident angle is greater than the first incident angle;

collecting scattered light caused by the second beam over said area and integrating the intensities of the scattered light over said area to form a second integrated response; and

comparing the first and second integrated responses to determine whether a defect is a particle or a subsurface defect.

86. (Previously Presented) The method of claim 85, wherein the second beam is directed at an incident angle of about 45-85 degrees relative to a normal to the surface.

87. (Previously Presented) The method of claim 85, wherein the scattered light is collected over a range of angles from negative to positive to a plane normal to the surface.

88. (Previously Presented) The method of claim 85, wherein the steps of collecting the scattered light comprise using a wide angle collector to collect the light.

89. (Previously Presented) The method of claim 85, wherein the steps of collecting the scattered light and integrating the scattered light intensities comprise capturing the scattered light over the predetermined area and focusing the captured light onto a detector operable for measuring light intensity.

90. (Currently Amended) A method for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the method comprising:

directing a beam of polarized light to impinge at said region on the surface at a predetermined incident angle relative to a direction normal to the surface;

collecting scattered light caused by the beam at a plurality of locations over a wide angular range and integrating the intensities of the scattered light from said locations to form a first integrated response;

directing a beam of S-polarized light to impinge at said region on the surface at the a predetermined incident angle relative to a direction normal to the surface;

collecting scattered light caused by the S-polarized beam at said locations and integrating the intensities of the scattered light from said locations to form a second integrated response; and

comparing the first and second integrated responses to determine whether a defect is a particle or a subsurface defect.

91. (Previously Presented) The method of claim 90, wherein the scattered light is collected over a range of angles from negative to positive relative to a plane normal to the surface.

92. (Previously Presented) The method of claim 90, wherein the steps of collecting the scattered light comprise using a wide angle collector to collect the light.

93. (Previously Presented) The method of claim 90, where the steps of collecting the scattered light and integrating the scattered light intensities comprise

capturing the scattered light over the wide angular range and focusing the captured light onto a detector operable for measuring light intensity.

94. (Currently Amended) An apparatus for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the apparatus comprising:

at least one light source operable to create a first polarized beam of light and direct the first beam onto the region of the substrate surface at a first incident angle relative to a direction normal to the surface, and operable to create a second beam of P-polarized light and direct the second beam onto the region of the substrate surface at a second incident angle relative to a direction normal to the surface and greater than the first incident angle;

a collection system positioned above the substrate surface for receiving light scattered from the surface to a plurality of locations distributed over a range of angles above the substrate surface, the collection system being operable for integrating intensities of the scattered light over said plurality of locations to produce total integrated response signals corresponding to the first light beam and the second P-polarized light beam; and

a processor in communication with the collection system and operable for comparing the total integrated response signal caused by the first P-polarized light beam with the ~~total~~ total integrated response signal caused by the second P-polarized light beam to determine whether a defect is a particle or a subsurface defect.

95. (Previously Presented) The apparatus of claim 94, wherein the collection system includes at least one wide angle collector.